

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.21**WELDING WITNESS REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000142**Date Inspected:** 10-Mar-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**Witness:** **Procedure Qualification Record**  
**Welding** **NDT**

**Welder Qualification** **Fracture Critical**  
**Mechanical Testing, describe:**Macroetch Test

**Index Lot #:** B49-005-07**Witness Lot #:** B71-013-07**Bridge No:** 34-0006**Component:** Bid: 52, 55 Tower & Girder**Welder:** Jiang Xiao Hu**ID #:** NA**Joint Description:** T-Joint

N/A

**WPS ID #:** PWPS-B-T-2133-1

N/A

**Base Metal:** A709-50F-2

N/A

**PQR ID #:** HP200715

N/A

**Thickness:** 26 mm

N/A

**Process:** FCAW

N/A

**Electrode Spec/Class:** AWS A5.20/E71T1-1

N/A

**Positions:** 3F min. multi pass weld

N/A

**Backing Material:** NA

N/A

**CWI:** Liu Liu

N/A

**Average Amps:**

N/A

**AWS Code:** D1.5

N/A

**Average Volts:**

N/A

**Applicable Sec:** 5.10.3

N/A

**Travel Speed:**

N/A

**Heat Input:**

N/A

**Preheat:**

N/A

**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector was present as requested to observe fillet welds microetch test for Procedure Qualification Record (PQR) HP300715. This test specimen was welded with the Flux Core Arc Welding (FCAW-G) process with the E71T-1 TWE-711 1.4 mm electrode, in the 3F (vertical) position. The test was performed per the AWS D1.5, Section 5.10.3 requirements. After the QA inspector performed visual inspection on the multiple fillet passes for PQR HP 200715 discovered that welds appeared to be in compliance with the Contract documents. The QA inspector performed dimensional inspections for the PQR HP200715 and discovered that test sample had a minimum multiple fillets welds passes of approximately 11.4 mm.

**Summary of Conversations:**

The QA inspector did not any significant conversations for this test on this date.

**Observed welding,testing or results:** is in general conformance with the contract requirements.  
is not in conformance with the contract requirements.

**Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural

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## WELDING WITNESS REPORT

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Materials for your project.

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**Inspected By:** Acuna,Alfredo

Quality Assurance Inspector

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**Reviewed By:** McClary,David

QA Reviewer